

DPD-2738-59 "


28 April 1959

MEMORANDUM FOR THE RECORD

SUBJECT: Status of System VII

1. As of this date a series of System VII test flights have been flown with the maximum range being 280 miles, with a desired goal of 375 miles. During the first flight, all six receivers were in operation. Coverage of so much frequency spectrum resulted in reception of a large number of signals, various combinations of which caused false starts of the tape transport. This problem has been greatly alleviated by the disabling of five of the six receivers, leaving only the receiver covering the frequency range of interest connected in the system. However, a number of powerful TV signals present have introduced large amounts of interference, obliterating the desired telemetry signal. The first series of flights were all flown in a generally easterly direction from the test site, which means the aircraft was in a high signal density area at all times. In an attempt to overcome this handicap a flight was flown on 25 April 1959 in a westerly direction. However, on this flight considerable interference was encountered from a signal since identified as a Voice of America transmitter. This signal did not falsely start the System VII recorder but did result in masking the desired telemetry signal. Investigation is under way to determine why this signal appeared in System VII since the signal was apparently transmitted on a frequency between 8 and 22 megacycles. This problem should be resolved in a few days.

2. Prior to deployment, it is proposed to investigate several possible reasons for the system failure to operate at the desired 375 miles. Edwards has stated that approximately seven days additional flight test time will be required to complete these investigations and has requested concurrence in so doing. Concurrence has been granted which means a completion date for System VII testing of 15 May 1959. An additional week will be required for accomplishment of aircraft modifications, resulting in a deployment date for the aircraft and System VII of approximately 22 May 1959.


R&D Staff Officer

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25 YEAR RE-REVIEW